RCE - Reply to Final Office Action of October 30, 2007

AMENDMENTS TO THE SPECIFICATION

At Paragraph [32]

Please amend paragraph [32] of the specification as follows:

For illustration, when Q1 << QiLi, $i \neq 1$ and that Q2L2 is dominant, the [32] estimated received power received by processor 106 may be reduced to P1 = Q2L2. In this case, a maximum power of interest at antenna 2 may be given by P1/L2, which is the estimated received power of antenna 1 divided by a measured power coupled factor between antennas 1 and 2. Therefore, the gain setting found for antenna 1 by the AGC through a long dwell time may be backed-off for use in antenna 2 to allow for a signal whose power is as large as P1/L2 to be detected properly at antenna 2. The gain for antenna 2 may not need to be predetermined but may be dynamically adjusted in each received frame. Repeating the same exercise for cases where Q3L3, ..., or QMLM dominates, the maximum power of interest is P1/Lj, where Lj = max(Li, i ≠ 1) is the power coupling factor 118 for antenna j. Since Lj is known, backing-off the gain setting found for antenna 1 to allow for P1/Lj to be detected properly at antenna j may also allow for P1/Li, i≠i,1 to be detected properly at antenna i. The gain setting for all antennas other than the starting antenna may be dynamically set as it is backed-off from the gain setting found for antenna 1. If there is sufficient time, the gain back-off may be implemented in more than one step. In this regard, a time required to finish dynamic gain control is much less than a time required to run a full automatic gain control (AGC) on each of the antenna channels in receiver system 100.